Amendments to the Specification:

Please amend the first paragraph of page 1 as follows:

This application is related to Docket No. HTIRC 02-003, Serial No. 10/392,118 filing date 03/19/03, now issued as US 7,040,005 and to Docket No. HTIRC 02-004, Serial No. 10/718,373 , filing date 11/20/03, now issued as US 7,016,168 all assigned to the same assignee as the current invention.

Please replace the final paragraph on page 5, extending through the entire page 6, with the following amended paragraph:

The objects stated above will be achieved by the application of a novel fabrication method to a CPP synthetic spin valve design disclosed in related patent application HTIRC 02-004, serial number 10/718,373, filing date 11/20/03, now issued as US 7,016,168, assigned to the same assignee as the present invention and fully incorporated herein by reference. For reference, there is shown in Fig. 1 a schematic of a prior art CPP GMR stack in which the stack formation comprises successive layers of uniform width formed on a conducting lead layer (42) of greater width than the stack layers. The layers include a seed layer (44), an antiferromagnetic pinning layer (46), a synthetic antiferromagnetic pinned layer (48) further comprising a second ferromagnetic layer (denoted AP2) (50), a coupling layer (52) and a first ferromagnetic layer (AP1) (54), a second Cu spacer layer (20), a

ferromagnetic free layer (10) and a Cu capping layer (12). The width of the layers (W) are identical and the stack is, thereby, of uniform width. In contrast, there is shown in Fig. 2 the CPP structure to be formed in the present invention and by use of its methods. That structure provides a low resistance current path by means of a novel design in which a ferromagnetic free layer (10) and Cu capping layer (12) of small dimension (<0.1 micron), is formed on a Cu spacer layer (20) of slightly larger dimension (approximately 0.3 microns) and that spacer layer is formed on a GMR stack (40) of synthetic spin valve configuration having equal, uniform layer dimensions that were larger that either of the above (>0.3 microns). The GMR stack includes a lead layer (42), a seed layer (44), an antiferromagnetic pinning layer (46), and a synthetic antiferromagnetic pinned layer (48), further comprising a second ferromagnetic layer (denoted AP2) (50), a coupling layer (52) and a first ferromagnetic layer (AP1) (54). The resultant resistance of such a stack is greatly reduced (as is fully disclosed in related applications HTIRC 02-003, serial no. 10/392,118, filing date 03/19/03, now issued as US 7,040,005 and HTIRC 02-004, serial no. 10/718,373, filing date 11/20/03, now issued as US 7,016,168, both assigned to a common assignee, fully incorporated herein by reference) compared to the prior art stack of uniform dimension shown in Fig. 1. In addition, the sensitivity of such a stack is retained even with the use of the small Cu spacer layers (20), since the spin diffusion length of electrons in Cu (the distance an electron can travel with its spin direction unchanged) is approximately 1500 angstroms. Therefore, the DR of the sensor (resistance change between parallel and antiparallel orientations of free and pinned layer magnetizations) is not changed, but the total resistance, R, is significantly reduced, so the GMR sensitivity, DR/R is increased. In addition, the reduced resistance and elimination

of hot spots allows a greater sensor current to be applied, increasing signal strength and further improving the sensitivity of the sensor.